

Amendments to the Claims:

There are no amendments to the claims in this Response. This listing of the claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (previously presented) A semiconductor-laser excited solid state laser apparatus comprising:

a semiconductor laser unit including an internal resonator; and

a solid state laser element which emits laser light in response to excitation light from said semiconductor laser unit;

wherein said internal resonator has a length of at least 0.8 mm, with said internal resonator length being dependent upon a characteristic of said solid state laser element.

2. (previously presented) A semiconductor-laser-excited solid state laser apparatus according to claim 1, wherein said internal resonator has a length of at least 1 mm.

3. (previously presented) A semiconductor-laser-excited solid state laser apparatus according to claim 1, wherein said internal resonator has a length of at least 1.5 mm.

4. (previously presented) A semi conductor-laser excited solid state laser apparatus, comprising:

a semiconductor laser unit including an internal resonator having a length of at least 0.8 mm;

a solid state laser element which emits laser light in response to excitation light from said semiconductor laser unit;

a solid state laser resonator having a solid state laser resonator length, wherein said solid state laser includes said solid state laser element and a mirror arranged outside of said solid state laser element, with said internal resonator length being independent of said solid state laser resonator length; and

a wavelength conversion element arranged in said solid state laser resonator, which generates a second harmonic wave.

5. (previously presented) A semiconductor-laser-excited solid state laser apparatus according to claim 4, wherein said internal resonator has a length of at least 1 mm.

6. (previously presented) A semiconductor-laser-excited solid state laser apparatus according to claim 4, wherein said internal resonator has a length of at least 1.5 mm.

7. (previously presented) A semiconductor-laser excited solid state laser apparatus as claimed in claim 1 wherein said internal resonator length is dependent upon an absorption band of said solid state laser element.

8. (previously presented) A semi conductor-laser excited solid state laser apparatus as claimed in claim 1 wherein said solid state laser element is a crystal doped with a highly reactive rare earth metal.
9. (previously presented) A semi conductor-laser excited solid state laser apparatus as claimed in claim 1 wherein said solid state laser element is a neodymium doped crystal.
10. (previously presented) A semi conductor-laser excited solid state laser apparatus as claimed in claim 1 wherein said solid state laser element is a YLF crystal.
11. (previously presented) A semi conductor-laser excited solid state laser apparatus as claimed in claim 1 wherein said solid-state laser element is a component of a Fabry-Perot solid state laser resonator.
12. (previously presented) A semi conductor-laser excited solid state laser apparatus as claimed in claim 1 wherein said internal resonator length is selected to cause a wavelength of said excitation light to remain within an absorption band of said solid state laser element.
13. (previously presented) A semiconductor laser excited solid state laser apparatus as claimed in claim 1 wherein a wavelength of said excitation light is independent of a driving current of said semiconductor laser unit.

14. (previously presented) A semi conductor-laser excited solid state laser apparatus as claimed in claim 4 wherein said internal resonator length is selected based upon an absorption band of said solid state laser element.

15. (previously presented) A semi conductor-laser excited solid state laser apparatus as claimed in claim 4 wherein said solid state laser element is a crystal doped with a highly reactive rare earth metal.

16. (previously presented) A semi conductor-laser excited solid state laser apparatus as claimed in claim 4 wherein said solid state laser element is a neodymium doped crystal.

17. (previously presented) A semi conductor-laser excited solid state laser apparatus as claimed in claim 4 wherein said solid state laser element is a YLF crystal.

18. (previously presented) A semi conductor-laser excited solid state laser apparatus as claimed in claim 4 wherein said wavelength conversion element is a MgO doped LiNbO₃ crystal.

19. (previously presented) A semi conductor-laser excited solid state laser apparatus as claimed in claim 4 wherein said internal resonator length is selected to cause a wavelength of said excitation light to remain within an absorption band of said solid state laser element.

20. (previously presented) A semiconductor laser excited solid state laser apparatus as claimed in claim 1 wherein a wavelength of said excitation light is independent of a driving current of said semiconductor laser unit.